

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Advisory Office Action of February 11, 2003 has been received and contents carefully reviewed.

In the Final Office Action mailed on November 1, 2002, the Examiner rejected claims 42-52, 54-66, 68, and 69 under 35 U.S.C. § 103(a) as being unpatentable over Shimada et al. (U.S. Pat. No. 5,852,485) in view of Ota et al. (U.S. Pat. No. 6,040,886); and rejected claims 53 and 67 under 35 U.S.C. § 103(a) as being unpatentable over Shimada et al. in view of Ota et al. and further in view of Ohta et al. (U.S. Pat. No. 5,929,958). These rejections are traversed and reconsideration of the claims is respectfully requested in view of the following amendments and remarks.

The rejection of claims 42-52, 54-66, 68, and 69 under 35 U.S.C. § 103(a) as being unpatentable over Shimada et al. in view of Ota et al. is respectfully traversed and reconsideration is requested.

Claim 42 is allowable over the cited references in that claim 42 recites a combination of elements including, for example “a transparent first metal layer and a transparent second metal layer directly on the gate insulator” None of the cited references, including Shimada et al. or Ota et al., singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicants respectfully submit that claims 42 and 43-55, which depend from claim 42, are allowable over the cited references.

Claim 56 is allowable over the cited references in that claim 56 recites a combination of elements including, for example “forming a transparent first metal layer and a transparent second metal layer directly on the gate insulator” None of the cited references, including Shimada et al. or Ota et al., singly or in combination, teaches or suggests at least these features of the claimed

invention. Accordingly, Applicants respectfully submit that claims 56 and 57-69, which depend from claim 56, are allowable over the cited references.

In the Final Office Action mailed on November 1, 2002, the Examiner cites Shimada et al. as disclosing “the picture element electrode (12, 16) and the counter electrode (11) are formed of conductive material, e.g., ITO... on the interlayer insulation layer (19) and the gate insulation layer (115), and even though the pixel electrode (12) and the common electrode (11) are not directly on the gate insulating layer (115), but both of them are on the gate insulating layer (115), such that the transparent first metal layer (pixel electrode [12]) and the transparent second metal layer (common electrode [11]) are disposed on the gate insulating layer (115).” The Examiner then cites Ota et al. as disclosing “...that the pixel electrode (3) and the common electrode (5) are formed on the gate insulation film (7).” The Examiner then states “[b]ecause the pixel electrode [3] and the common electrode [5] are formed on the same layer and the same process as those signal electrodes (2,18), so that they would simplify the manufacture process” and concludes “...it would have been obvious to... arrange the pixel electrode and the common electrode formed on the gate insulator as claimed in claims 42 and 56 for achieving simplify manufacture process.”

Assuming *arguendo* that Ota et al. the pixel electrode 3 and the common electrode 5 of Ota et al. are formed of the same material, in the same process, and on gate insulator 7, Applicants respectfully submit the aforementioned teaching of Ota et al. would not provide one of ordinary skill in the art the impetus to modify Shimada et al. by providing the counter electrode 11 and the picture element electrode 12 of Shimada et al. directly on the gate insulation film 115 of Shimada et al.

For example, the pixel electrode 3 of Ota et al. is actually either a source or drain electrode (see, for example, Ota et al. at column 6, lines 49-50). Shimada et al., on the other

hand, discloses wherein a picture element electrode 12 is connected to a drain electrode 112 through a connecting electrode 16 and a contact hole 17 (see, for example Shimada et al. at column 11, lines 37-39), wherein the drain electrode 112 is formed of n<sup>+</sup>-a-Si (see, for example Shimada et al. at column 12, lines 9-10), and wherein a counter electrode 11, the picture element electrode 12, and the connecting electrode 16 are all made out of ITO (see, for example Shimada et al. at column 12, lines 50-61). In other words, Shimada et al. discloses wherein the counter electrode 11 is formed of a different material than the drain electrode 112 and wherein the drain electrode 112 is not the picture element electrode 12.

Accordingly, Applicants respectfully submit Ota et al. supplies no suggestion or motivation to modify Shimada et al. and arrive at the claimed invention. Further, such combination is suggested only by the claimed invention, which is considered impermissible hindsight reconstruction.

The rejection of claims 53 and 67 under 35 U.S.C. § 103(a) as being unpatentable over Shimada et al. in view of Ota et al. and further in view of Ohta et al. is respectfully traversed and reconsideration is requested.

Claims 53 and 67 include all of the limitations of claims 42 and 56, respectively, as discussed above, and Shimada et al. in view of Ota et al. fails to teach or suggest at least these features of independent claims 42 and 56 as recited above. Similarly, Ohta et al. fails to cure the deficiencies of Shimada et al. in view of Ota et al. Accordingly, Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness regarding claims 53 and 67 in view of claims 42 and 56, as above.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a

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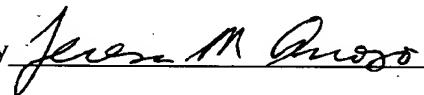
telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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By 

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